

In the Claims:

Please amend claims 1, 4-5, and 9 as follows:

1. (Currently Amended) A magnetoresistive transducer comprising:
a magnetoresistive film extending over a surface of a fundamental layer;
a pair of domain control layers extending over the surface of the fundamental

layer so as to interpose the magnetoresistive film along the fundamental layer;

~~a pair of lead layers respectively spreading over surfaces of the domain control layers; and~~

a first lead layer spreading over a surface of one of the domain control layers without contacting the other domain control layer;

a second lead layer spreading over a surface of the other domain control layer without contacting the one of the domain control layer; and

an upper shield layer opposed to the magnetoresistive film at a first interface extending along a datum plane, said upper shield layer opposed to the domain control layers at a second interface extending along the datum plane.

2. (Original) The magnetoresistive transducer according to claim 1, wherein said fundamental layer is a lower non-magnetic gap layer spreading over a surface of a lower shield layer.

3. (Original) The magnetoresistive transducer according to claim 2, further comprising an upper non-magnetic gap layer interposed between the magnetoresistive film and the upper shield layer, said upper shield layer contacting the upper non-magnetic gap layer at the first interface.

4. (Currently amended) The magnetoresistive transducer according to claim 3, wherein asaid first and second lead layerlayers are made of an Au thin film is interposed between the domain control layerlayers and the upper shield layer.

5. (Currently amended) The magnetoresistive transducer according to claim 4, wherein said upper non-magnetic gap layer extends over the first and second lead layerlayers, said upper shield layer contacting the upper non-magnetic gap layer at the second interface.

6. (Previously presented) A magnetoresistive transducer comprising:
a magnetoresistive film extending over a surface of a fundamental layer;
a pair of domain control layers extending over the surface of the fundamental layer so as to interpose the magnetoresistive film along the fundamental layer;
an upper shield layer opposed to the magnetoresistive film at a first interface extending along a datum plane, said upper shield layer opposed to the domain control layers

at a second interface extending along the datum plane; and

a groove formed on the upper shield layer so as to isolate the first and second interfaces from each other.

7. (Original) The magnetoresistive transducer according to claim 6, wherein said fundamental layer is a lower non-magnetic gap layer spreading over a surface of a lower shield layer.

8. (Original) The magnetoresistive transducer according to claim 7, further comprising an upper non-magnetic gap layer interposed between the magnetoresistive film and the upper shield layer, said upper shield layer contacting the upper non-magnetic gap layer at the first interface.

9. (Currently amended) The magnetoresistive transducer according to claim 8, wherein a lead layer made of an Au thin film is interposed between at least one of the domain control ~~layer~~layers and the upper shield layer.

10. (Original) The magnetoresistive transducer according to claim 9, wherein said upper non-magnetic gap layer extends over the lead layer, said upper shield layer contacting the upper non-magnetic gap layer at the second interface.

11-16. (Cancelled)

17. (Previously presented) A magnetoresistive transducer comprising:
a magnetoresistive film extending over a surface of a fundamental layer;
a pair of domain control layers extending over the surface of the fundamental layer so as to interpose the magnetoresistive film along the fundamental layer;
an upper shield layer opposed to the magnetoresistive film at a first interface, said upper shield layer opposed to the domain control layers at a second interface; and
a groove formed between the first interface and the second interface on said upper shield layer so as to isolate the first and second interfaces from each other, said groove sinking into the upper shield layer from the first and second interfaces.